# Commercial Subscribers: Determining Sensitive Element Occurrences on Selected Quads Using ArcGIS

This topic is basically about Relating and Joining tables in ArcGIS ArcMap. If you have never done this before, please read this topic in ArcGIS Help documentation. If you prefer, a relate can also be done in ArcView 3.x or even a relational database software such as Microsoft Access.

If you want to view a complete list of the Element Occurrences (EOs) that are Sensitive in the CNDDB, they are in the INFO table elmo_sen.df. You can view this table in ArcMap by following the instructions below. You can also export this table from ArcCatalog to a DBF format and import into Microsoft Access, as this is really a relational database activity being done in GIS software.

Basically you are going to relate the quads layer to a linking table (senquad.lnk) which in turn you will link to elmo_sen.df. Elmo_sen.df is a file that we distribute to our commercial subscribers so that they can find out which Element Occurrences are on the quads which are flagged "Sensitive."

**Instructions in ArcGIS**
Open the CNDDB.mxd file in ArcMap 8.x
Turn off all layers except the 7.5 Quads with Sensitive EOs
In the table of contents (left side of map document) click on the "Source" tab

You are now going to add some "Info" tables:

Click on the "+" to add more data
Navigate to the \\gis directory in C:CNDDB3
Add "senquad.lnk"
Add "elmo_sen.df"

Establish relates:
In the map view, right click on the 7.5 Quads with Sensitive EOs layer
Click on "Joins and Relates"  > Relates

Make these selections in the numbered sections:
1. QUADCODE
2. senquad.lnk
3. QUADCODE
4. To Senquad
"OK"

Right click on the senquad.lnk
click on "Joins and Relates" > Relates

Make these selections is the numbered sections:
1. MAPNDX
2. elmo_sen.df
3. FCODE
4. To elmo_sen

Select quads in the Quad layer
Right click on the layer and open the attribute table
Click on Options > Related Tables ... Select the relate: To senquad

The senquad.lnk table will open and there will be some records selected
Click on Options > Relates Tables ... Select the relate To elmo_sen
The elmo_sen table will open and there will be some records selected.
These records are the Element Occurrences that are "Sensitive" in RareFind/CNDDB that are located somewhere in the Quads that you selected.

You can save the Map Document and the relates will be there to use until you remove them or replace/remove the Map Document.